SWFS# 41-AA-0008

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 97-009
UPDATED WASTE DISCHARGE REQUIREMENTS AND RESCISSION OF ORDER NO. 88-019

CYPRESS-AMLOC LAND COMPANY
HILLSIDE CLASS III WASTE DISPOSAL SITE
COLMA, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. Cypress-AMLOC Land Company (hereinafter called the discharger) owns and operates the Hillside Landfill, a Class III waste disposal site located in the City of Colma, San Mateo County as shown in Figure 1.

2. The Hillside Landfill is surrounded by the Cypress Hills Golf Course to the southwest, a mobile home park to the northwest, and the San Bruno Mountain State and County Park to the north and east. Access to the site is from Hillside Boulevard.

3. The purpose of this order is to update Waste Discharge Requirements for the ongoing construction, operation, and maintenance of a Class III landfill and for submission of a remediation plan for VOC impacted groundwater detected at the landfill's perimeter.

SITE DESCRIPTION

4. The Hillside Landfill began operation in 1971. However, prior to 1971 the site operated as a burn dump, a pig farm, and a sand quarry. The discharger operates the Hillside Landfill as a canyon-fill that is constructed in intermediate phases until the ultimate configuration is reached. The permitted landfill disposal area consists of 57.8 acres. The permitted disposal area is comprised of the following five sub-areas:

   - Parcel 1 is a closed 15 acre disposal area that was used for the disposal of Class III waste which include demolition wastes, dry paper waste, landscaping wastes, roofing wastes, and general household rubbish. The unit was closed in 1974 with approximately 250,000 tons of in-place waste. The unit was capped with fine-grained sand and silt taken from the site's soils.

     Parcel 1 does not have a liner constructed beneath the waste or a leachate collection system. However, Parcel 1 does have a landfill gas collection system. A portion of the Cypress Hills Golf Course overlies Parcel 1.

   - Module 1 (also called Parcel 2): Module 1 is located in the northwestern portion of the landfill and covers approximately 23.6 acres. The module has been in operation since the early 1970's. The module has taken various Class III wastes including: paper, cardboard, household wastes, construction, demolition, and yard wastes.

Module 1 was constructed with a five-foot thick clay bottom liner and partial leachate collection and removal system. The module is also equipped with a gas extraction system. A large portion of the module has been completed to final grade. The module will continue to receive wastes until the final capacity is reached.

- Module 2, Module 3, and Module 4 (also called Parcel 3) These modules are located in the eastern section of the landfill and cover approximately 19.2 acres. The modules have received construction, demolition, wood, yard, and paper wastes since 1988.

- The modules are constructed with a composite liner system which consists of 2.5 feet of clay overlain by a 60-mil HDPE geomembrane. The modules are constructed with a blanket leachate collection and removal system. The Discharger has indicated that a landfill gas recovery system needs to be installed.

The discharger has estimated that Modules 1, 2, 3,and 4 will receive waste until approximately October 1999.

5. The Board adopted Waste Discharge Requirements Order No. 80-7 on February 19, 1980. Order No. 88-019 adopted by the Board on February 17, 1988, amended Order No. 80-7. The Order also updated the groundwater monitoring and waste containment system requirements for the Hillside Landfill operations. The Discharger is required to comply with the requirements of Board Order No. 93-113 which establishes general waste discharge requirements for all municipal solid waste landfills regulated by this Board.

WASTES AND THEIR CLASSIFICATION

6. The discharger is permitted to dispose of the following Class III wastes at the Hillside Landfill: dry wastes, construction and demolition waste, clean soils, cardboard, glass, paper, and landscape wastes. The landfill accepts soil with total petroleum hydrocarbon contamination less than 100 ppm consistent with Board staff approval dated December 27, 1996. The discharger is permitted by San Mateo County to take a maximum of 400 tons of waste per day. Hazardous wastes, sewage sludge, liquid wastes, food wastes, household garbage, manure, and dead animals are prohibited from disposal at the site.

GEOLOGY

7. The landfill lies along the southwest base of San Bruno Mountain. The Hillside Landfill is located on the northeastern edge of a small structural basin bounded by the Santa Cruz Mountains to the southwest and San Bruno Mountain on the northeast. Strain between the Pacific and North American plates resulted in the formation of the basin. The bedrock underlying the basin consists of rocks of the Cretaceous Franciscan Formation. To the east across the Hillside Fault zone, the bedrock beneath the San Bruno Mountain consists of rocks of the Franciscan Formation overlain by the Late Cretaceous San Bruno Sandstone.

LITHOLOGY

8. Lithologic units in the vicinity include, from oldest to youngest, the Cretaceous Franciscan Formation, Late Cretaceous San Bruno Sandstone, and Colma Formation.

   The Franciscan Formation in the vicinity of the landfill consists of highly recrystallized metagreywacke with minor interbedded black shale, serpentine, and greenstone. The metagreywacke and shale are highly jointed and fractured.

   The San Bruno Sandstone consists predominantly of fine to medium grained, slightly recrystallized sandstone that forms San Bruno Mountain. The sandstone is highly fractured. The San Bruno Sandstone and the Franciscan Formation are subject to land slides.

   The Colma Formation consists of fine to medium grained sands, silts, and clays deposited within estuarine, and stream environments. The Colma Formation is very permeable with generated rising and falling head permeability tests yielding results from $5.7x10^{-3}$ to $1.1x10^{-2}$ cm/sec.

FAULTING AND SEISMICITY

9. There are three faults in the vicinity of the site, the San Andreas Fault, the San Bruno Fault, and the Hillside Fault. The following paragraphs briefly summarize each fault.

   San Andreas Fault: The San Andreas fault is located approximately 2.7 miles southwest of the landfill. The San Andreas Fault is the seismically active plate boundary between the North American and the Pacific plates. The maximum probable earthquake generated by this fault for the landfill has been estimated by the discharger to be 8.3 on the Richter scale. Major strike-slip motions along the San Andreas Fault have resulted in the formation of a number of associated faults in the region of the landfill. The Hillside and San Bruno Faults are among these.

   Hillside Fault: The Hillside Fault is located within and cuts through the northeast portion of the site. It consists of a 300 to 3000-foot-wide zone of intensely sheared shale, sandstone, and melange. The fault appears to be covered by the Pleistocene Colma Formation. Mapping by the discharger's consultant found no Holocene age displacement along the inferred trace of the fault. Investigations by the discharger of an outcrop at the landfill conducted in 1988 revealed a shear zone from the Hillside Fault which has penetrated the Franciscan Formation but not the Pleistocene Colma Formation. Investigations of the Hillside Fault conducted for the USGS (USGS report by Hengesh and Wakabayashi, 1995) suggest that the Hillside Fault has not been active during the Holocene. Additionally, the Division of Mines and Geology concluded that the fault is Pre-Quaternary.

   San Bruno Fault: The San Bruno Fault is located approximately 1/2 mile southwest of the site. The fault is considered to be buried beneath the Colma Formation in the center of the Merced Valley. No displacement of the overlying Colma Formation due to movement along the fault is known. The San Bruno fault has been dated as pre-Quaternary and is not considered active by the Division of Mines and Geology.

SURFACE WATER AND GROUNDWATER

10. Surface water: Three major drainages originate from San Bruno Mountain in the vicinity of the landfill. Surface water from the northernmost drainage is diverted around the perimeter of the landfill. The central and easternmost drainage flow to the landfills sedimentation pond (SB-1) (Figure 2). Runoff from the landfill flows into the Colma Creek Basin.

The Hillside disposal site lies well above the 100 year flood plane. The 100 year, 24-hour storm event was estimated to be 4.82 inches.

Regional Groundwater: The Daly City aquifer is currently located approximately 1/2 mile southwest of the landfill. However, the Daly City aquifer was reported to have extended beneath the landfill in 1972. The Daly City aquifer measures approximately 1.5 to 2.5 miles wide and 9 miles long and has an estimated elevation of -300 feet MSL. The discharger has estimated that the base of the landfill is 650 feet above the Daly City Aquifer. The aquifer is used for both domestic and agricultural purposes. Several irrigation wells which are located within 1/2 mile from the landfill extract groundwater from the aquifer. The closest drinking water well to the site is located over one-mile away.

Local A-Zone Groundwater: A 15 to 25 foot thick saturated zone designated Water-Bearing Zone A (Zone A) occurs within the upper portion of the Colma Formation in the southwest region of the landfill and underlies a portion of the Cypress Hills Golf Course. The discharger has reported that the recharge of the Zone A groundwater is greatly increased by irrigation of the Cypress Hills Golf Course. The general direction of Zone A groundwater flow is to the southwest away from the landfill at an estimated velocity of 3400 to 3700 feet per year.

Local B-Zone Groundwater: Groundwater beneath most of the landfill reportedly occurs in a thin perched zone at the base of the Colma formation. The saturated zone, designated Water-Bearing Zone B (Zone B), generally follows the topography of the top of the Franciscan bedrock beneath it which reportedly serves as an aquitard.

SURFACE WATER AND GROUNDWATER DEGRADATION

11. Surface Water Degradation: The landfill has one downstream surface water sampling point, which is the Sedimentation Basin SB-1. Trace amounts of 1,1,1-trichloroethane (TCA) were detected in the basin in 1990. TCA has not been detected in at SB-1 since the 1990 detection.

Groundwater Degradation: Background groundwater quality indicates that groundwater upgradient from the site has not been impacted by the landfill or other offsite operations. However, the discharger has reported that both the A Zone and B Zone groundwater has been impacted by the landfill. The Solid Waste Assessment Test (SWAT) monitoring indicated that the electrical conductivity ranged from 1059 to 1300 umhos/cm. The SWAT monitoring indicated that metal concentrations in the groundwater were generally low. The discharger has reported that low levels of volatile organic compounds (VOCs) have been detected in groundwater wells downgradient

from the landfill. Several detected VOCs have exceeded drinking water standards. The second quarter 1996 groundwater monitoring report indicated the following contaminants were detected in the landfill's groundwater:

Well E-2: Benzene at 11 ug/l and phenol at 0.056 ug/l.
Well E-9A: Cis 1,2-Dichloroethene at 37 ug/l, and trichloroethene at 7.8 ug/l.
Well E-10: Cis 1,2-Dichloroethene up to 7.2 ug/l, 1,1-dichloroethene at 3.7 ug/l and chlorobenzene at 3.0 ug/l.
Well E-11: Cis 1,2-Dichloroethene at 26 ug/l, and trichloroethene at 4.8 ug/l.
Well E-12A: Cis 1,2-Dichloroethene at 9.8 ug/l, and trichloroethene at 5.4 ug/l.

12. Vadose Zone Degradation: Data from the lysimeters US-1, US-2, US-3, and US-4 indicated the vadose zone has been impacted by VOCs from the landfill. Lysimeter US-1 reportedly contained low concentrations of benzene. Ten VOCs were detected in lysimeter US-2 (during the SWAT monitoring) the highest was 1,1- dichloroethane at 10 ug/l. Lysimeter US-3 detected eight VOCs, the highest was 48 ug/l for 2-butanone. The discharger reported that metals were below or near the detection limits.

13. Background water quality: A current approval of a background well for the site has yet to be established. The discharger originally monitored Well E-5 as a background well from February 1987 to June 1989. Well E-5 was subsequently abandoned during expansion of the landfill. The discharger will install a new background well, Well E-13 during the spring of 1997.

14. The Board adopted a revised Water Quality Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20 and November 13, respectively, of 1995. A summary of regulatory provisions is contained in Title 23 of the California Code of Regulations at Section 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater.

Beneficial Uses: The existing beneficial uses of the Merced Valley Groundwater Basin include:

- Municipal and domestic water supply
- Agricultural supply
- Industrial service water supply
- Industrial process water supply

The beneficial uses of Colma Creek are as follows:

- Wildlife habitat
- Municipal and domestic supply
- Agricultural supply
- Industrial supply
- Groundwater recharge

GROUNDWATER MONITORING SYSTEM

15. The landfill has leaked VOCs to groundwater below the site. In response to the leakage, the discharger has implemented in accordance with Article 5 of Chapter 15 an Evaluation Monitoring Program (October 1991 report). The discharger currently monitors: eight groundwater wells, one groundwater collection sump, one leachate sump, three leachate wells, and four lysimeters. The discharger has not implemented a corrective action program which addresses the VOC contamination.

CLOSURE PLANS

16. Portions of the landfill have been partially closed pursuant to a Board approved November 1979 closure plan entitled, "Final Closure Plan and Solid Waste Management for AMLOC Companies, Inc. Hillside Solid Waste Disposal Site". The discharger has submitted a November 1992 report entitled "Preliminary and Partial Final Closure and Post Closure Maintenance Plan." The discharger revised the 1992 plan in March 1993.

FINANCIAL ASSURANCE DOCUMENTATION

17. The Discharger is required pursuant to Title 14, and Title 23 of the California Code of Regulations, to submit to this Board evidence of an **Irrevocable Postclosure Fund** or provide other financial means acceptable to the Executive Officer, to ensure closure and post closure maintenance of the landfill. The discharger has provided financial assurance documentation in a submittal dated December 1993. The discharger's documentation has been approved by the California Integrated Waste Management Board.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

18. The County of San Mateo adopted a Final Environmental Impact Report (EIR) on November 12, 1987 for the expansion of the Hillside Landfill. The findings from the EIR identified adverse impacts from the expansion at the landfill and identified measures which would mitigate the adverse impacts and allow the expansion of the landfill. Compliance with this Order will assure that impacts to State waters from leachate and waste disposal operations to will be mitigated by the installation of waste containment systems and leachate collection and containment systems.

COMMENTS

19. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge, and has provided them with an opportunity to submit their written views and recommendations.

20. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Cypress-AMLOC Land Company, their agents, successors and assigns, shall meet the applicable provisions contained in Title 23, Division 3, Chapter 15 (Chapter 15) of the California Code of Regulations and Division 7 of the California Water Code, and shall comply with the following:

A. PROHIBITIONS

1. The disposal of waste shall not create a condition of pollution or nuisance as defined in Section 13050 (l) and (m) of the California Water Code.

2. Wastes shall not be placed in or allowed to contact ponded water from any source whatsoever.

3. Wastes shall not be disposed of in any position where they can be carried from the disposal site and discharged into waters of the State or of the United States.

4. The landfill shall be operated to assure that all wastes will be a minimum of five feet above the highest anticipated elevation of underlying groundwater.

5. Leachate from wastes and ponded water containing leachate or in contact with waste shall not be discharged to waters of the State or of the United States.

6. Wastes not specified in this Order, and hazardous wastes, as defined in Sections 2521 of Chapter 15, **shall not** be deposited or stored at this site.

7. The discharger **shall not** discharge wastes which have the potential to reduce or impair the integrity of the containment structures or which, if commingled with other wastes in the unit, could produce chemical reactions that create heat or pressure, fire or explosion, toxic by-products, or reaction products which in turn:

    a. require a higher level of containment than provided by the unit,
    b. are "restricted hazardous wastes " (as defined in Section 25122.7 of the Health and Safety Code, or
    c. impair the integrity of the containment structures.

8. Construction of the containment features at the Hillside Landfill must be in compliance with this Order and Chapter 15. Wastes shall not be placed in any area of the landfill until the Executive Officer has received an approved certification by a California registered civil engineer or certified engineering geologist that the waste containment systems have been constructed in accordance with the landfill's waste containment system design plans.

9. The discharger, or any future owner or operator of this site, shall not cause the following conditions to exist in waters of the State or of the United States at any place outside the waste management facility:

    a. Surface Waters:

        - Floating, suspended, or deposited macroscopic particulate matter or foam.

        - Bottom deposits or aquatic growth.

        - Adversely alter temperature, turbidity, or apparent color beyond natural background levels.

        - Visible, floating, suspended or deposited oil or other products of petroleum origin.

        - Toxic or other deleterious substances to be present in concentrations or quantities which may cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

    b. Groundwater:

        - The groundwater shall not be degraded as a result of the waste disposal operation.

10. Hazardous wastes, sewage sludge, liquid wastes, food wastes, household garbage, manure, and dead animals are prohibited from disposal at the site.

B. SPECIFICATIONS

1. All reports pursuant to this Order shall be prepared under the supervision of a registered civil engineer, California registered geologist or certified engineering geologist.

2. Water used during disposal operations shall be limited to dust control, fire suppression and earthfill moisture conditioning.

3. The site shall be protected from any washout or erosion of wastes from inundation which could occur as a result of a 100-year, 24 hour precipitation event, or as the result of flooding with a return frequency of 100 years.

4. Surface drainage from tributary areas and internal site drainage from surface and subsurface sources shall not contact or percolate through waste during disposal operations or during the postclosure life of the site. Drainage courses constructed over intermediate covered fill areas shall be maintained to prevent exposure of wastes. Drainage courses constructed over final capped wastes will be underlain with a

minimum 5-foot thickness of compacted earthfill or a lined drainage course which offers equivalent protection.

5. Any present and future leachate monitoring and control system shall be maintained and operated to prevent the buildup of hydraulic head on the bottom of the landfill as well as the toe of the landfill. This system shall be periodically inspected, and any accumulated fluid shall be removed to the maximum extent possible.

6. A geologic map of the base of the excavation shall be continuously updated as excavation proceeds. This includes, but is not limited to, all fracture and shear zones, and areas where there is not a five foot separation between groundwater and the waste.

7. Future waste containment systems installed at the site shall be equipped with a LCRS. The LCRS shall be designed and operated to prevent the development of hydraulic head on the liner. Minimum criteria for the floor liner shall include, but not be limited to, two feet of low permeability clay, 60 mil HDPE liner, and a LCRS. Minimum requirements for the floor and typical requirements for the side slope liner systems are included in Figure 3. All liner designs must be approved by Board staff prior to installation.

8. Any expansion of undeveloped portions of the landfill shall be designed and constructed in compliance with Chapter 15, Subtitle D, and this Order. The final design plans shall be submitted to the Executive Officer for review and approval and shall include, but not be limited to, the engineered design plans for the project, the construction specifications, a construction quality assurance (QA/QC) plan. The final construction report shall include, but not be limited to, construction record drawings (as-built drawings) for the project, a QA/QC report with a written summary of the QA/QC program and all test results and analyses, and construction certification.

9. The discharger shall ensure that the foundation of the site, containment systems, the refuse fill, the structures which control leachate, surface drainage, erosion, and gas for this site are constructed and maintained to withstand conditions generated during the maximum probable earthquake. For the Hillside Landfill the maximum probable earthquake of Richter magnitude 8.3 is expected to occur on the San Andreas Fault.

10. Hazardous wastes and infectious wastes shall not be disposed of at this landfill. Waste approved for disposal at this landfill as specified in this Order must be discharged in accordance with all regulations and provisions of the California Integrated Waste Management Board, California Department of Toxic Substance Control, and local health and land use agencies' requirements.

11. As portions of the landfill are closed, the exterior surfaces shall be graded to promote lateral runoff of precipitation and prevent ponding. The final cover for the landfill will have a minimum slope of three percent plus an allowance for subsidence. The final cover of the entire landfill shall have a permeability less than or equal to the permeability of any bottom liner. The final cover must also meet all other applicable requirements as described in this Order, Article 8 of Chapter 15, Title 14, and Part 258.60 of Title 40 of the CFR. In a February 1994, submittal the discharger indicated

that the site will be covered with the cover specified in Figure 4.

12. The discharger shall comply with the Evaluation Monitoring Program Requirements of Section 2550.9, Article 5 of Chapter 15. The evaluation monitoring program shall be used to assess the nature and extent of the release from the landfill and to design a corrective action program which meets the requirements of Section 2550.10, Article 5 of Chapter 15.

13. The concentrations of indicator parameters or waste constituents in waters passing through the point of compliance, as defined in Section 2550.2 of Article 5, Chapter 15, shall not exceed the "Water Quality Protection Standard" (WQPS), of the Self-Monitoring and Reporting Program ,Table A-1.

14. Pursuant to Section 2550.3 of Article 5, Chapter 15, these Waste Discharge Requirements specify the constituents of concern to which the water quality protection standard of Section 2550.2 of Article 5 applies. Constituents of concern are the waste constituents, reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the landfill. For this landfill the constituents of concern include all Subtitle D, Appendix I and Appendix II constituents (recent analytical results are contained in the first quarter 1995 groundwater report).

15. The discharger shall install any reasonable additional groundwater and leachate monitoring devices required to fulfill the terms of any Self-Monitoring and Reporting Program issued by the Executive Officer.

16. Interim cover shall be maintained over all waste, at all times, except for the active face area of the disposal operations, or as provided for by the performance standards adopted by the California Integrated Waste Management Board.

17. Methane and other landfill gases shall be adequately vented, removed from the landfill units, or otherwise controlled to minimize the danger of explosion, adverse health effects, nuisance conditions, or the impairment of beneficial uses of water due to migration through the vadose (unsaturated) zone.

18. This Board considers the property owner and site operator to have continuing responsibility for correcting any problems which arise in the future as a result of waste discharge or related operations during the operational and postclosure maintenance periods.

19. The discharger shall provide a minimum of two surveyed permanent monuments near the landfill from which the vertical and horizontal position of wastes, containment structures, and monitoring facilities can be determined throughout the operational and post-closure maintenance periods. These monuments shall be installed by a licensed land surveyor or registered civil engineer.

20. The Board shall be notified immediately of any slope failure occurring at the landfill. Any failure which potentially compromises the integrity of containment structures or the

landfill shall be promptly corrected after approval of the method and schedule by the Executive Officer.

21. The discharger shall notify the Board at least 180 days prior to beginning any intermediate or final closure activities. This notice shall include a statement that all closure activities will conform to the most recently approved closure plan and that the plan provides for site closure in compliance with all applicable regulations.

22. The discharger shall comply with all applicable provisions of Chapter 15 that are not specifically referred to in this Order.

C. PROVISIONS

1. The discharger shall comply with all Prohibitions, Specifications, and Provisions of this Order, immediately upon adoption of this Order or as provided below.

2. The discharger shall submit a detailed **Post Earthquake Inspection and Corrective Action Plan** acceptable to the Executive Officer to be implemented in the event of any earthquake generating ground shaking of Richter Magnitude 6.5 or greater at or within 30 miles of the landfill. The report shall describe the containment features, and ground water monitoring and leachate control facilities potentially impacted by the static and seismic deformations of the landfill. The plan shall provide for reporting results of the post earthquake inspection to the Board within 72 hours of the occurrence of the earthquake. Immediately after an earthquake event causing damage to the landfill structures, the corrective action plan shall be implemented and this Board shall be notified of any damage.
REPORT DUE DATE: March 31, 1997

3. The discharger shall submit a groundwater remediation plan and schedule acceptable to the Executive Officer which addresses the VOC contaminated groundwater at the landfill's perimeter.
REPORT DUE DATE: February 28, 1997

4. The discharger shall submit a plan and schedule acceptable to the Executive Officer to repair or replace blocked/damaged leachate wells LW-1 and LW-2. In addition, the submittal shall include a plan and schedule for the periodic pumping of leachate from leachate wells LW-1, LW-2, and LW-3.
REPORT DUE DATE: May 1, 1997

5. The discharger shall submit a plan and schedule acceptable to the Executive Officer to replace the manual leachate recovery system installed in Leachate Sump L-1 with a automated dedicated leachate pump and recovery system.
REPORT DUE DATE: April 15, 1997

6. The discharger shall submit to this Board and, unless otherwise exempted, to the California Integrated Waste Management Board, evidence of an **irrevocable Closure Fund or provide other means to ensure closure and postclosure maintenance of waste**

management units at the landfill, pursuant to Section 2580(f) of Chapter 15. The Closure Fund must provide sufficient funds to properly close the landfill and for the post-closure monitoring, leachate management, and maintenance of the site. For the purposes of planning the amount of the fund, the discharger shall assume a post-closure period of at least 30 years. However, the post-closure maintenance period shall extend as long as the wastes pose a threat to water quality.
REPORT DUE DATE: December 1, 1998, and every five years thereafter.

7. As the landfill expansion areas are filled the discharger shall close previous landfill units. The discharger shall submit an updated Final Closure and Post Closure Maintenance Plan. The plan shall include a schedule which calls for the closure of existing landfill units, limits the extent of intermediate cover and maximize the extent of final cover, and addresses the concerns raised upon review of the previous closure and post closure maintenance plan (March 1993) of the Regional Board and the California Integrated Waste Management Board.
SCHEDULE DUE DATE: March 15, 1997

8. The discharger shall submit, within 90 days after the closure of any portion of the landfill, a closure certification report which documents that the area has been closed according to the requirements of this Order and Chapter 15. The discharger shall certify under penalty of perjury that all closure activities were performed in accordance with the most recently approved closure plan and in accordance with all applicable regulations.

9. The discharger shall submit a revised surface water drainage plan, and surface water drainage operation and maintenance plan acceptable to the Executive Officer for the landfill.
REPORT DUE DATE: July 1,1997

10. The discharger shall install a new groundwater monitoring well placed near the location of former Well E-3. The well shall be properly located and screened to detect releases from the landfill and shall be incorporated into the attached Self Monitoring and Reporting Program.
INSTALLATION DUE: JUNE 15, 1997

11. The discharger shall install background groundwater monitoring well E-13 and incorporate the well into the attached Self Monitoring and Reporting Program.
INSTALLATION DUE: JUNE 15, 1997

12. The discharger shall submit an updated **Contingency Plan** acceptable to the Executive Officer to be instituted in the event of a leak or spill from the leachate facilities currently constructed and leachate facilities required by this Order. The discharger shall give immediate notification to the San Francisco Bay Regional Water Quality Control Board, the Local Enforcement Agency (LEA), and the California Department of Toxic Substance Control. The discharger shall initiate its corrective action plan to stop and contain the migration of pollutants from the site.
REPORT DUE DATE: March 31,1997.

13. The Discharger shall comply with the requirements of the attached Self Monitoring and Reporting Program.

14. The discharger shall comply with the requirements of Board Order No. 93-113 which establishes general waste discharge requirements for all municipal solid waste landfills regulated by this Board.

15. The discharger shall remove and relocate any wastes which are discharged after the date of adoption of this Order in violation of these requirements.

16. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of the waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries of the disposal areas or the ownership of the site. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office. To assume operation of this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order within 30 days of the change of ownership. The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contact with the Board. Failure to submit the request shall be considered a discharge without requirements, a violation of California Water Code.

17. The discharger shall immediately notify the Board of any event which in any way might compromise the integrity of the waste, leachate, or gas containment facilities or precipitation and drainage control structures.

18. The discharger shall maintain all devices or designated features installed in accordance with this Order such that they continue to operate as intended without interruption except as a result of failures which could not have been reasonably foreseen or prevented by the discharger.

19. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

20. The discharger shall permit the Board or its authorized representative, upon presentation of credentials:

    a. Immediate entry upon the premises on which wastes are located or in which any required records are kept.

    b. Access to copy any records required to be kept under the terms and conditions of this Order.

    c. Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order or by any other California state agency.

d. Sampling of any discharge or groundwater governed by this Order.

21. These requirements do not authorize or commission any act causing injury to the property of another or of the public; do not convey any property rights; do not remove liability under federal, state or local laws; and do not authorize the discharge of wastes without appropriate permits from other agencies or organizations.

22. This Order is subject to Board review and updating, as necessary, to comply with changing state or federal laws, regulations, policies, or guidelines; changes in the Board's Basin Plan; or changes in the discharge characteristics.

23. Board Order No. 88-019 is hereby rescinded.

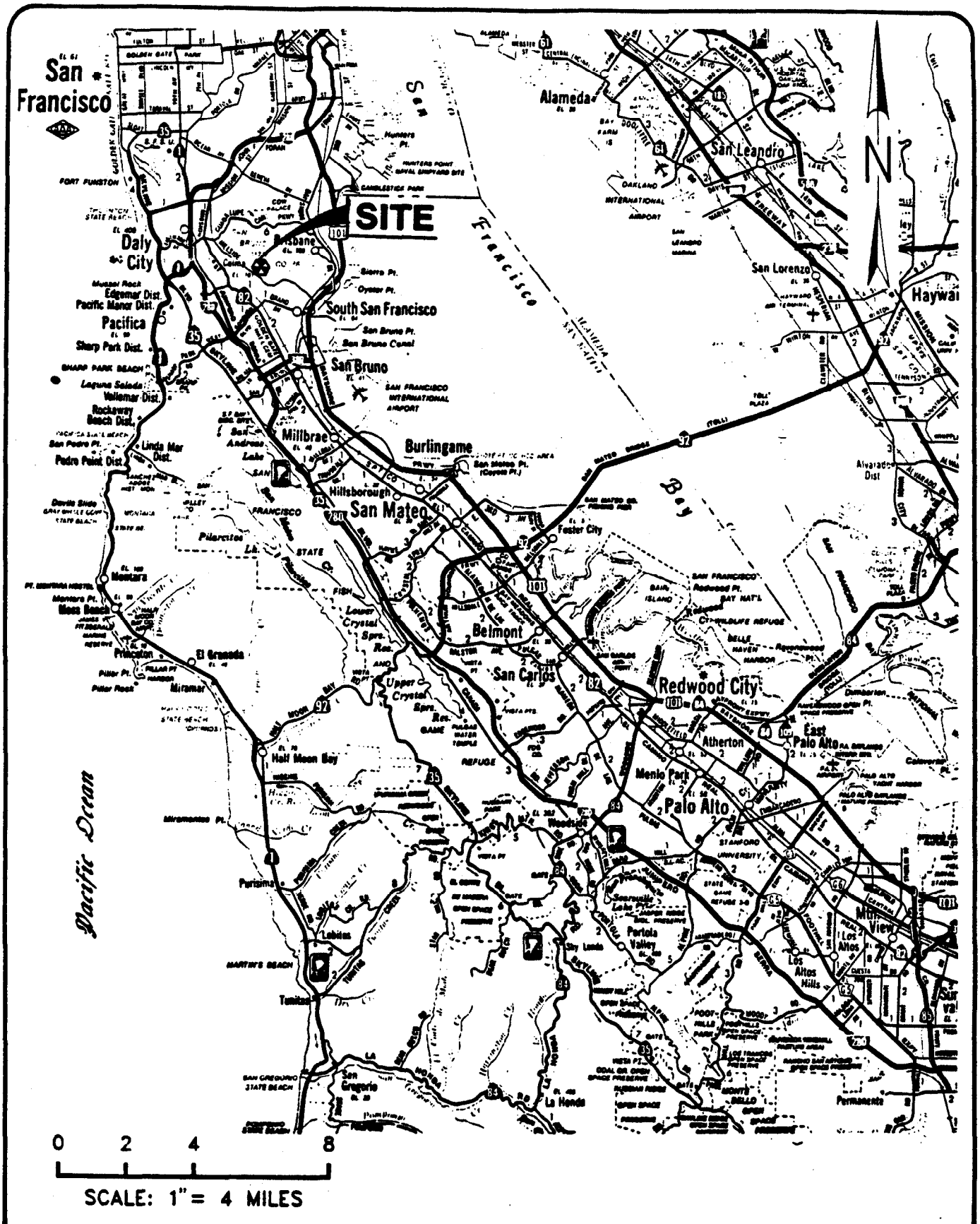
I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, complete, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on January 15, 1997

Loretta K. Barsamian
Executive Officer

Attachments:

Figure 1. Landfill Location Map
Figure 2. Landfill Monitoring Point Map
Figure 3. Liner Details
Figure 4. Final Cover Configuration

Self Monitoring and Reporting Program

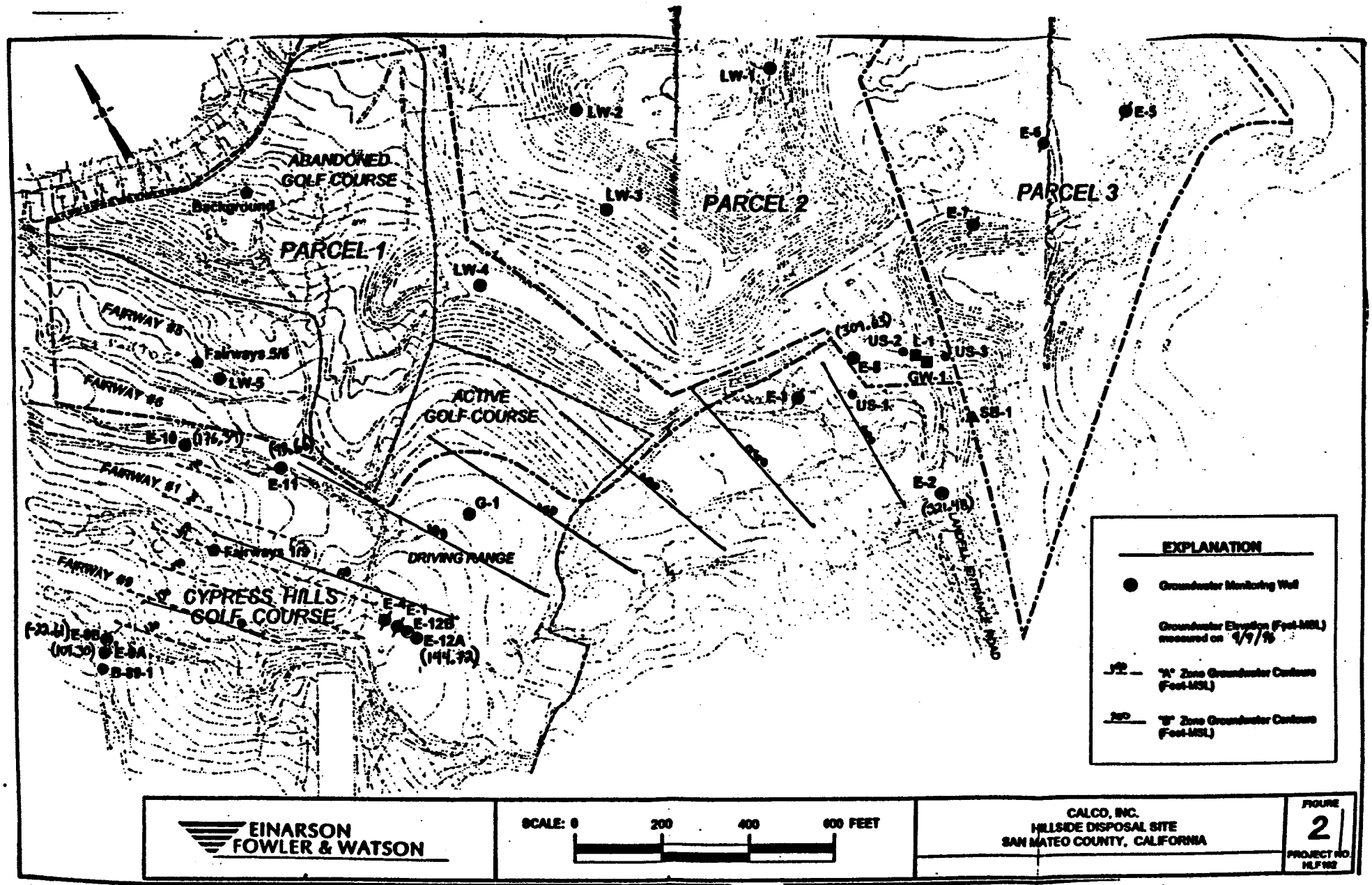


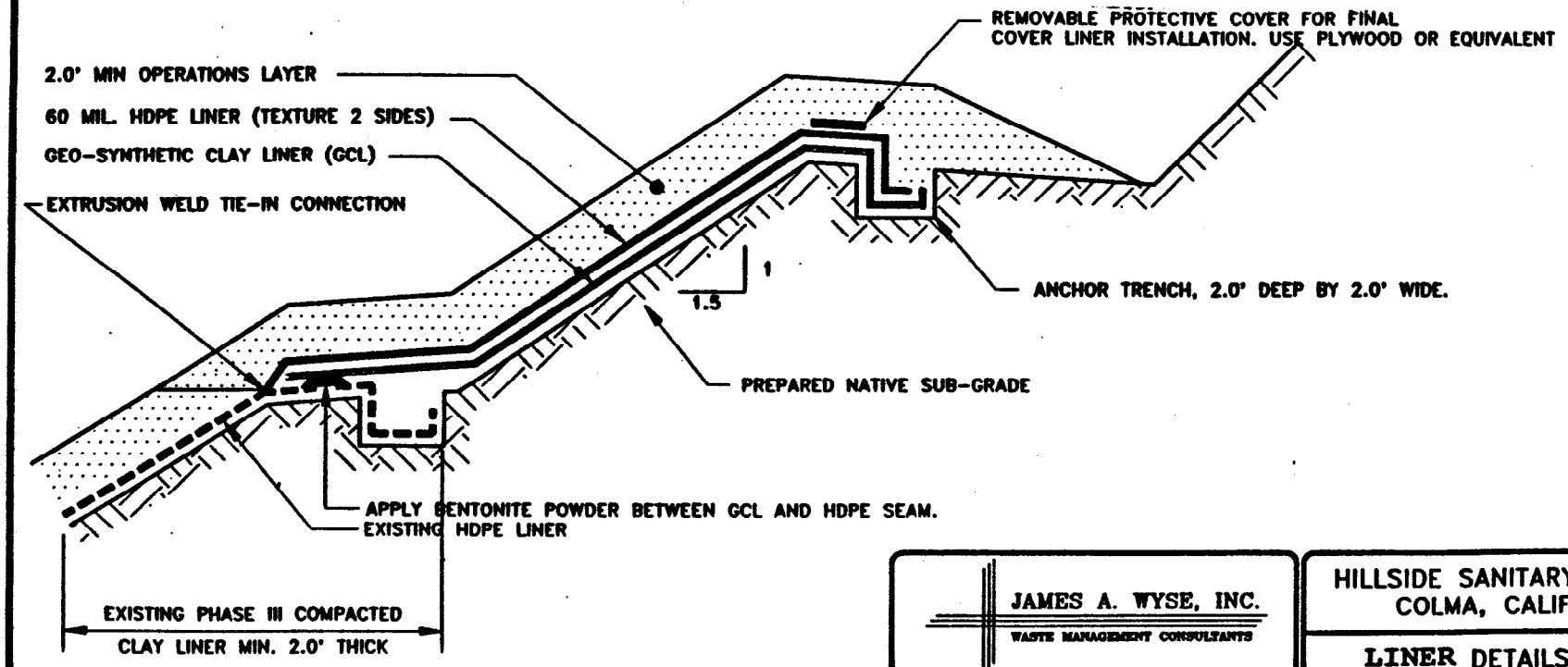
JAMES A. WYSE INC.
WASTE MANAGEMENT CONSULTANTS

CALCO
HILLSIDE CLASS III DISPOSAL SITE
COLMA, CALIFORNIA

SITE LOCATION MAP

FIGURE
1
PROJECT NO.
100-1.24


ABANDONED GOLF COURSE
Background
PARCEL 1
PARCEL 2
PARCEL 3
ACTIVE GOLF COURSE
CYPRESS HILLS GOLF COURSE
DRIVING RANGE
LW-1
LW-2
LW-3
LW-4
LW-5
E-5
E-6
E-7
E-8
E-1
E-2
US-1
US-2
US-3
L-1
GW-1
SB-1
G-1
E-10
E-11
E-12B
E-12A
E-9A
B-99-1
FAIRWAY #5
FAIRWAY #6
FAIRWAY #7
FAIRWAY #8
Fairways 5/6
Fairways 7/8
EXPLANATION
Groundwater Monitoring Well
Groundwater Elevation (Feet-MSL) measured on 4/9/96
"A" Zone Groundwater Contours (Feet-MSL)
"B" Zone Groundwater Contours (Feet-MSL)
EINARSON FOWLER & WATSON
SCALE: 0 200 400 600 FEET
CALCO, INC.
HILLSIDE DISPOSAL SITE
SAN MATEO COUNTY, CALIFORNIA
FIGURE 2
PROJECT NO. HLF102

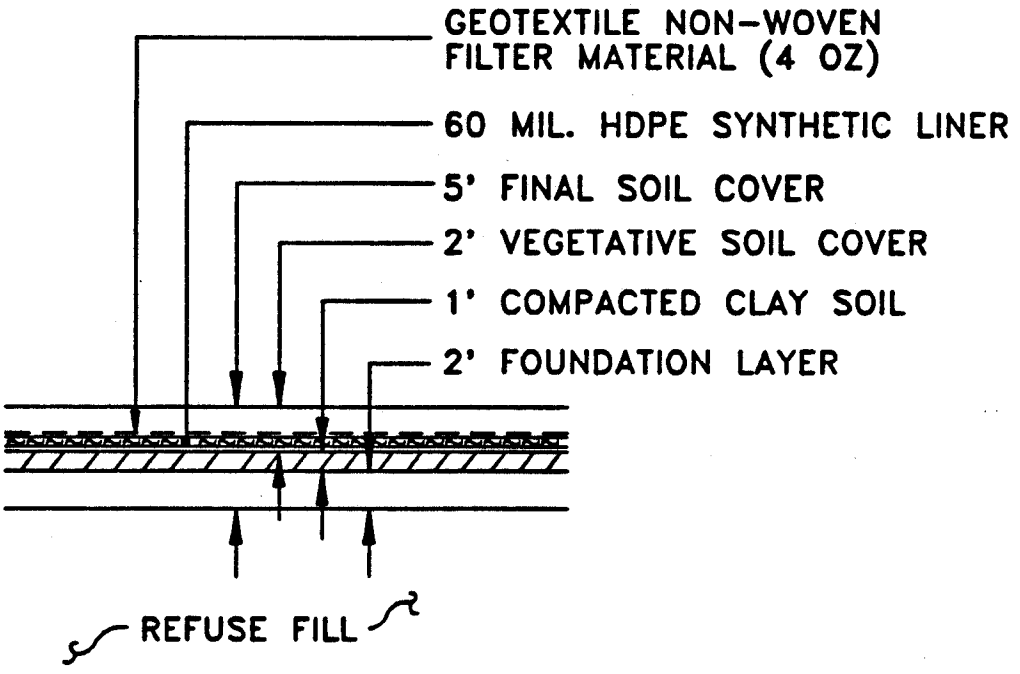


JAMES A. WYSE, INC.
WASTE MANAGEMENT CONSULTANTS

HILLSIDE SANITARY LANDFILL
COLMA, CALIFORNIA

LINER DETAILS

FIGURE
3
PROJECT NO.
100-1.37



FINAL SOIL COVER
DETAIL 1

1" = 10'

JAMES A. WYSE INC.
WASTE MANAGEMENT CONSULTANTS

CALCO
HILLSIDE CLASS III DISPOSAL SITE
COLMA, CALIFORNIA

SUBTITLE "D" FINAL COVER

FIGURE
4
PROJECT NO.
100-1.28

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING AND REPORTING PROGRAM

FOR

HILLSIDE LANDFILL
CLASS III SOLID WASTE DISPOSAL SITE

SAN MATEO COUNTY

ORDER NO. 97-009

CONSISTS OF

PART A

AND

PART B

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Board's Resolution No. 73-16.

The principal purposes of a self-monitoring and reporting program are: (1) to document compliance with Waste Discharge Requirements and prohibitions established by the Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of standards of performance, and toxicity standards, (4) to assist the discharger in complying with the requirements of Article 5, Chapter 15.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the most recent version of EPA or Standard Methods and in accordance with a sampling and analysis plan approved by the Board.

Water and waste analysis shall be performed by a laboratory approved for these analyses by the State of California. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A grab sample is a discrete sample collected at any time.

2. Receiving waters refers to any surface water which actually or potentially receives surface or groundwater which pass over, through, or under waste materials or contaminated soils. In this case the groundwater beneath and adjacent to the landfill areas, and the surface runoff from the site are considered receiving waters.

3. Standard observations, at the time of monitoring or in the event of unanticipated discharge, refer to:

   a. Receiving Waters

      1) Floating and suspended materials of waste origin: presence or absence, source, and size of affected area.
      2) Discoloration and turbidity: description of color, source, and size of affected area.

3) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
4) Evidence of beneficial use: presence of water associated wildlife.
5) Flow rate.
6) Weather conditions: wind direction and estimated velocity, total precipitation during the previous five days and on the day of observation.

b. Perimeter of the waste management unit.

1) Evidence of liquid leaving or entering the waste management unit, estimated size of affected area and flow rate. (Show affected area on map)
2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
3) Evidence of erosion and/or daylighted waste.

c. The waste management unit.

1) Evidence of ponded water at any point on the waste management facility.
2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
3) Evidence of erosion and/or daylighted waste.
4) Standard Analysis (SA) and measurements include:
   a. pH (EPA Method 9040)
   b. Electrical Conductivity (EC) (EPA Method 9050)
   c. Total Dissolved Solids (TDS) (EPA Method 160.1)
   d. Total Phenols
   e. Chloride (EPA Method 300)
   f. Total Organic Carbon
   g. Nitrate Nitrogen (EPA Method 300)
   h. Total Kjeldahl Nitrogen
   i. Water elevation in feet above mean sea level
   j. Settleable Solids ml/l/hr
   k. sulfate (EPA Method 300)
   l. 47 VOCs (EPA Method 8260)

D. SAMPLING, ANALYSIS, AND OBSERVATIONS

The discharger is required to perform sampling, analyses, and observations in the following media:

1. Groundwater per Chapter 15, Section 2550.7(b)
2. Surface water per Chapter 15, Section 2550.7(c)
3. Per the general requirements specified in Section 2550.7(e) of Article 5, Chapter 15.

E. RECORDS TO BE MAINTAINED

Written reports shall be maintained by the discharger or laboratory, and shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:

1. Identity of sample and sample station number.

2. Date and time of sampling.

3. Date and time that analyses are started and completed, and name of the personnel performing the analyses.

4. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used.

5. Calculation of results.

6. Results of analyses, and laboratory reporting limits for each analysis.

F. REPORTS TO BE FILED WITH THE BOARD

1. The Annual Self-Monitoring and Reporting Program report shall be filed by October 30. The annual report can be combined with the discharger's summer/fall semiannual report. Semi-annual self monitoring reports shall be filed on April 30th and October 30th.Quarterly reports shall be filed on January 30th, April 30th, July 30th , and October 30th. Monthly reports shall be filed by the 10th day of the month following the month of interest. The reporting period: means the duration separating the submittal of a monitoring report from the time the next iteration of that report is scheduled for submittal.

The self-monitoring reports shall be comprised of at least the following:

a. Letter of Transmittal

A letter transmitting the essential points in each report should accompany each submittal. Such a letter shall include a discussion of **any requirement** violations found during the last report period, and actions taken or planned for correcting the violations. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

b. Each self-monitoring report shall include a compliance evaluation summary. The summary shall contain:

1) Groundwater flow and direction: A description and graphic presentation of the velocity and direction of groundwater flow under/around the waste management unit, based upon the past and present water level elevations and pertinent visual observations.

2) The method and time of water level measurement, the type of pump used for purging, pump placement in the well; method of purging, pumping rate, equipment and methods used to monitor field pH, temperature, and conductivity during purging, calibration of the field equipment, results of the pH, temperature, conductivity, and turbidity testing, well recovery time, and method of disposing of the purge water.

3) A written discussion of the groundwater analyses indicating any change in the quality of the groundwater.

4) Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations.

c. A comprehensive discussion of the compliance record, and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.

d. A map or aerial photograph shall accompany each report showing observation and monitoring station locations.

e. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board.

1) The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA Methods or Standard Methods are used, the exact methodology must be submitted for review and approved by the Executive Officer prior to use.

2) In addition to the results of the analyses, laboratory quality assurance/quality control (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical reporting limits; the recovery rates; an explanation for any recovery rate that is less than 80% or greater than 120%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.

f. An evaluation of the effectiveness of the leachate detection/collection, monitoring, control, and removal facilities, which includes an evaluation of leachate buildup within the disposal units, a summary of leachate volumes removed from the units, and a discussion of the leachate disposal/treatment methods utilized.

g. An evaluation of the effectiveness of the groundwater underdrain detection, monitoring, control, and removal facilities, which includes an evaluation of fluid buildup within this system, a summary of fluid volumes removed, and a discussion of the disposal/treatment methods utilized.

h. A summary and certification of completion of all standard observations for the waste management unit, the perimeter of the waste management unit, and the receiving waters.

i. The quantity and types of wastes disposed of during each quarter of the reporting period, and the locations of the disposal operations. Locations of waste placement shall be depicted on a map showing the area, if any, in which filling has been completed during the previous calendar year.

j. A summary statement describing the findings from the discharger's: periodic load checking/screening program, and waste characterization program.

k. Tabular and graphical summaries of the monitoring data obtained during the previous year; the report should be accompanied by a $3^1/_2$" computer data disk, MS-DOS ASCII format, tabulating the year's data.

l. The Annual Monitoring Report shall be submitted to the Board covering the previous monitoring year. The report shall contain:

   1) A Graphical Presentation of Analytical Data [§2550.7(e)(14) of Article 5]. For each Monitoring Point, submit in graphical format the laboratory analytical data for all samples taken. Each such graph shall plot the concentration of one or more constituents over time for a given Monitoring Point, at a scale appropriate to show trends or variations in water quality. All graphs for a given constituent shall be plotted at the same scale to facilitate visual comparison of monitoring data. On the basis of any aberrations noted in the plotted data, the Executive Officer may direct the Discharger to carry out a preliminary investigation [§2510(d)(2)], the results of which will determine whether or not a release is indicated or is increasing;

   2) A tabular summary of all the monitoring data obtained during the previous year;

   3) A comprehensive discussion of the compliance record, and the result of any corrective actions taken or planned which may be needed to bring the Discharger into full compliance with the waste discharge requirements;

   4) A map showing the area, if any, in which fill has been completed during the previous calendar year; and

5) A written summary of the groundwater analysis from the previous year indicating any change in the quality of the groundwater; and,

6) An evaluation of the effectiveness of the leachate monitoring/control facilities.

2. CONTINGENCY REPORTING

a. A report shall be made by telephone of any **seepage** from the disposal area immediately after it is discovered. A written report shall be filed with the Board within five days thereafter. This report shall contain the following information:

1) a map showing the location(s) of discharge;
2) approximate flow rate;
3) nature of effects; i.e. all pertinent observations and analyses; and
4) corrective measures underway or proposed.

b. A report shall be made in writing to the Board within seven days of determining that a **statistically significant difference** occurred between a downgradient sample and a WQPS. Notification shall indicate what WQPS(s) has/have been exceeded. The discharger shall immediately resample at the compliance point where this difference has been found and re-analyze.

c. A report shall be made by telephone of any requirement violation(s) immediately after it is discovered. A written report shall also be filed within seven days that includes a discussion of the requirement violation(s), and actions taken or planned for correcting the violation(s).

d. If resampling and analysis confirms the earlier finding of a statistically significant difference between monitoring results and WQPS(s) the discharger must submit to the Board, an amended Report of Waste Discharge as specified in Section 2550.8(k)(5) for establishment of an Evaluation Monitoring Program (EMP) meeting the requirements of Section 2550.9 of Chapter 15.

e. Within 180 days of determining statistically significant evidence of a release, submit to the Board an engineering feasibility study for a Corrective Action Program (CAP) necessary to meet the requirements of Section 2550.10. At a minimum, the feasibility study shall contain a detailed description of the corrective action measures that could be taken to achieve background concentrations for all constituents of concern.

3. WELL LOGS

A boring log and a monitoring well construction log shall be submitted for each sampling well established for this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Department of Water Resources. These shall be submitted within 30 days after well installation.

Part B

1. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS

A. WASTE MONITORING - Observe monthly, Report quarterly

1. Record the total volume and weight of waste in cubic yards and tons disposed of at the site during each month showing locations and dimensions on a sketch or map.
2. Record a description of waste stream to include percentage of waste type (i.e., construction and demolition waste, petroleum contaminated soil, landscape waste, etc.
3. Record location and aerial extent of disposal of waste, with map locations .
4. Remaining landfill capacity/waste volume in place ;

B. FACILITIES MONITORING - Observe quarterly, report annually

The discharger shall inspect all facilities to ensure proper and safe operation. The facilities to be monitored shall include, but not be limited to:

1. Leachate Collection and Removal Systems;
2. Surface water retention basins;
3. Landfill subdrain/groundwater removal system;
4. Interior landfill drainage/berm system;
5. Leak detection system (where applicable);
6. Leachate management facilities and secondary containment; and
7. All other surface water runoff containment structures.

C. PHOTODOCUMENTATION OF FACILITIES MONITORING - Observe quarterly and report annually

The discharger shall provide photodocumentation of conditions at locations that include, but are not limited to, the landfill facilities listed in Part B, 1.B. above. Locations from which photographs are taken should be permanent stations such that they can be used for successive reports.

D. ON-SITE OBSERVATIONS

STATION	DESCRIPTION	OBSERVATIONS	FREQUENCY
V-1 thru V-`n'	Located on the waste disposal area as deli-neated by a 500 foot grid network.	Standard observations for the waste management unit.	Weekly observations, Report quarterly
P-1 thru P-`n' (per-imeter)	Located at equidistant intervals not exceeding 1000 feet around the perimeter of the waste management unit.	Standard observations for the perimeter.	Weekly observation, Report quarterly

A map showing visual and perimeter compliance points (V and P stations) shall be submitted by the discharger along with the quarterly monitoring report.

E. SEEPAGE MONITORING

Seepage monitoring stations include any point or points at which seepage is found occurring from the disposal area. The landfill perimeter shall be monitored according to the following; with the **results reported quarterly**.

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
S-1 thru S-'n'	At any point(s) at which seepage is found occurring from the disposal area	Standard observation for the perimeter and standard analysis other than "i" (perform analysis once per seep)	Daily until remedial action is taken and seepage ceases.

F. SURFACE WATER MONITORING

The discharger shall monitor the sedimentation basin outfall (SB-1). SB-1 is the sedimentation basin outfall located in the northeast portion of the landfill, adjacent to the entrance road.

Surface water station SB-1 shall be **sampled monthly** if water is present from October 15 through April 15, within two hours of the beginning of the first storm or as soon as sufficient water is available for sampling. SB-1 shall be **sampled quarterly** if water is present from April 16 through October 14. The sampling event **results shall be reported quarterly**. SB-1 shall be sampled according to Table A-1.a with the sampling frequency exception noted above.

G. VADOSE ZONE MONITORING

Lysimeters: US-1, US-2, US-3, and US-4 are to be sampled and analyzed **quarterly** according to Table A-1.b.

H. GROUNDWATER MONITORING

Groundwater samples are to be **collected quarterly** from groundwater wells (E-2, E-8, E-9A, E-9B, E-10, E-11, E-12A, E-12B, and E-13) and groundwater sump (GW-1) and are to be sampled and analyzed according to Table A-1.a.

Groundwater collection sump GW-1 is a sump for a dendritic groundwater collection system which was installed underneath Module 2, Module 3 and Module 4. The sump is capable of being manually pumped if the analytical data indicates a release has occurred. GW-1 is to be sampled and analyzed **quarterly** according to Table A-1.a.

Groundwater wells E-9A, E-9B, E-10, E-11, E-12A, and E-12B monitor downgradient groundwater below Parcel 1. Groundwater well E-2 is located just west of the Sedimentation Basin. Groundwater well E-8 is located at the southern border of the landfill, and monitor downgradient groundwater.

Groundwater wells: E-1, E-3, E-4 , E-5, E-6, E-7, G-1, and SU-1 have been abandoned.

The above listed monitoring wells are to be sampled and the data submitted for all Subtitle D Appendix I and Appendix II constituents by December 1998, 2003, 2008...., and every five years thereafter.

I. QA/QC SAMPLE MONITORING

The discharger shall collect duplicate, field blank and equipment blank groundwater samples for each semiannual monitoring event. The duplicate sample shall be monitored for: pH, chloride, TDS, nitrate, sulfate, and VOCs; the field and equipment blank for VOCs by EPA Method 8260; and, the trip blank for VOCs by EPA Method 8240 or 8260.

J. LEACHATE MONITORING

The following leachate monitoring locations are included in the leachate monitoring program: LW-1, LW-2, LW-3 and leachate collection sump L-1 shall be monitored as indicated below.

STATION	DESCRIPTION	OBSERVATION	FREQUENCY
L-1 thru LW-'n'	Leachate control facilities including sump and wells to be installed	Volume of leachate built up at base of landfill, and volume removed	See below

1. Leachate shall be monitored monthly from leachate wells and sumps LW-1, LW-2, and LW-3. Leachate shall be periodically pumped according to a plan approved by the Board from LW-1, LW-2 and LW-3.

   Leachate will be collected from sump L-1 by a dedicated automated leachate pump. The leachate sump, and leachate sumps and wells to be installed shall be **pumped to the lowest possible level daily**, and will be verified to have been **pumped dry weekly.** The leachate collection and removal systems shall be **inspected weekly.**

   For all leachate monitoring wells and sumps the discharger shall include in **the quarterly report** a measurement of the estimated volume of leachate collected, and method of leachate disposal. The Discharger shall **report monthly, and average daily leachate rates** for each leachate sump.

2. Leachate shall be **analyzed for chemical constituents on a quarterly** basis (according to Table A-1 a.) and the **results reported quarterly**.

3. Collected leachate shall be transported to a wastewater treatment facility for disposal. Leachate shall not be used for dust control.

K. GROUNDWATER COLLECTION SUMP

The volume of groundwater recovered from the groundwater sump GW-1 shall be **recorded monthly**. The discharger shall monitor the groundwater quality quarterly (according to Table A-1.a). The discharger shall include in the quarterly report a measurement of the estimated volume of groundwater collected, and the **monthly and average daily** groundwater volumes for the GW-1, and the analytical results.

L. LANDFILL GAS CONDENSATE

Landfill gas condensate removed from the landfill's gas collection system shall be transported for disposal at a wastewater treatment plant. For each condensate monitoring point the discharger shall include in the **quarterly report** a measurement of the estimated volume of condensate collected, and the **monthly and average daily condensate volumes** for each condensate collection point.

TABLE A-1
SELF-MONITORING AND REPORTING PROGRAM -LIST OF ANALYTICAL PARAMETERS AND WATER QUALITY PROTECTION STANDARDS FOR THE HILLSIDE LANDFILL

a.

Groundwater wells and sumps: E-2, E-8, E-9A, E-9B, E-10, E-11, E-12A, E-12B, E-13 and GW-1
Leachate Wells and Sumps: LW-1, LW-2 , LW-3 ,and L-1,
Sedimentation Basin: SB-1 Note: SB-1 shall be monitored according to the sampling frequency specified in Part B.1.F
Water Quality Protection Standards for volatile and semi-volatile organic compounds shall be set at MCLs.

PARAMETERS	EPA METHOD	MAXIMUM CONCENTRATION LEVEL	SAMPLING FREQUENCY
pH	9040	7.04	quarterly
Electrical Conductivity	9050	335.4	"
Chloride	300	46.1	"
Total Organic Carbon	415.2	2.99	"
TDS	160.1	297	"
Kjeldahl Nitrogen	351.2	1.13	"
Nitrate as nitrogen (N03-N)	353.2	1.47	"
Total Phenols	420.1	Non Detect	"
Sulfate (SO4)	375.4	not established	"
VOCs	8260	Non Detect	"
Calcium	6010	not established	"
Magnesium	6010	not established	"
Sodium	6010	not established	"
Iron	6010	not established	"

b.

Lysimeters: US-1, US-2, US-3 and US-4

PARAMETERS	EPA METHOD	SAMPLING FREQUENCY
pH	9040	quarterly
Chloride	300	"
Total Organic Carbon	415.2	"
TDS	160.1	"
Kjeldahl Nitrogen	351.2	"
Nitrate as nitrogen (NO_3-N)	353.2	"
Sulfate (SO_4)	375.4	"
VOCs	8260	"

I, Loretta K. Barsamian Executive Officer, hereby certify that the foregoing Self-Monitoring and Reporting Program:

1. Has been developed in accordance with the procedures set forth in this Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in this Board's Order No. 97-009

2. Is effective on the date shown below.

3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer.

Loretta K. Barsamian

Date Ordered: January 15, 1997

Loretta K. Barsamian
Executive Officer

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

NOTICE OF EXEMPTION
From the Requirements of
The California Environmental Quality Act

To: State Of California
Office of Planning & Research
1400 10th Street
Sacramento, CA 95814

From: California Regional Water Quality Control Board, San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Project Title: CYPRESS-AMLOC LAND COMPANY, HILLSIDE CLASS III WASTE DISPOSAL SITE, COLMA, SAN MATEO COUNTY
Waste Discharge Requirements, Order No. 97-009

Project Location - Specific: Colma, California.

Project Location - County: San Mateo County.

Description of Nature, Purpose, and Beneficiaries of Project:

Nature: The Order updates Waste Discharge Requirements for ongoing operations at the Class III landfill. The Order requires the submission of a remediation plan for VOC impacted groundwater detected at the landfill's perimeter. The Order establishes tasks and a time schedule for operational based requirements.

Purpose: To protect the quality and beneficial uses of waters of the State of California.

Beneficiaries: People of the State of California

Name of Public Agency Approving Project: California Regional Water Quality Control Board, San Francisco Bay Region

Name of Person or Agency Carrying Out Project: Cypress- Amloc Land Company

Exempt Status:

Ministerial (Sec. 15073)
Declared Emergency (Sec. 15071 (a))
Emergency Project (Sec. 15071 (b) and (c))
X Categorical Exemption. State type and section number: Waste Discharge Order: CCR, 15301
Other Exemption. State type:

Reason Why Project is Exempt: Waste Discharge Requirements

Contact Person:
Terry Seward

Telephone No.
(510) 286-4155

Loretta K. Barsamian
Executive Officer

Date Filed:
January 15, 1997